

Instructions: Bold fields must be completed.

Station Summary					
Waterbody Name BULL GUS CREEK			Waterbody ID Code 2926700		Sample ID (YYYYMMDD-CY-FD) 20161003-26-02
Sampling Location DS FR 703					Database Key 133643872
SWIMS Station ID 10037096		SWIMS Station Name BULL GUS CREEK 100M DS OF FR 703			
Latitude 46.30315	Longitude -90.50524	Lat/Long Determination Method (circle) SWIMS SWDV GPS		Datum Used if using GPS WGS84 or NAD83	
Basin (WMU) LAKE SUPERIOR		Watershed Name TYLER FORKS		County IRON	
Sample and Site Descriptors					
Sample Collector (Last Name, First) JON KLEIST			Project Name NOR LONG-TERM TREND WADEABLE REFERENCE STREAMS		
Sampling Device					
<input checked="" type="checkbox"/> Kick Net		<input type="checkbox"/> Surber Sampler		<input type="checkbox"/> Eckman	
<input type="checkbox"/> Ponar		<input type="checkbox"/> Artificial Substrate		<input type="checkbox"/> Hess Sampler <input type="checkbox"/> Other: _____	
Habitat Sampled					
<input checked="" type="checkbox"/> Riffle		<input type="checkbox"/> Run		<input type="checkbox"/> Pool	
<input type="checkbox"/> Other		<input type="checkbox"/> Shoreline Composite		<input type="checkbox"/> Proportionally-Sampled Habitat	
<input type="checkbox"/> Littoral Zone		<input type="checkbox"/> Profundal Zone		<input type="checkbox"/> Wetland	
Total Sampling Time (min) 5	Estimated Area Sampled (m ²) 2	Number of Samples in Composite 1		Replicate No. 1 of 1	
Reason For Sampling					
<input checked="" type="checkbox"/> Least Impacted Reference		<input type="checkbox"/> Baseline		<input type="checkbox"/> Impact / Treatment Site	
<input type="checkbox"/> Control Site		<input type="checkbox"/> Trend		<input type="checkbox"/> Other: _____	
Water Temp. (C) 12.36	D.O. (mg/l) 7.61	D.O. (% sat.) 71.4	pH (su) 6.65	Conductivity (umhos/cm) 64	Transparency (cm) 7120
Water Color <input checked="" type="checkbox"/> Clear <input type="checkbox"/> Turbid <input type="checkbox"/> Stained			Estimated Stream Velocity (m/s) <input type="checkbox"/> Slow (<0.15 m/s) <input checked="" type="checkbox"/> Moderate (0.15 m/s - 0.5 m/s) <input type="checkbox"/> Fast (>0.5 m/s)		
Measured Velocity circle units m/s or f/s		Average Stream Depth of reach (m) 0.2		Average Stream Width of reach (m) 4	
Composition of Substrate Sampled (Percent):					
Bedrock: _____		Boulders (basketball or larger): 10		Rubble (tennisball to basketball): 60	
Sand: 10		Clay: _____		Gravel (ladybug to tennisball): 20	
Aquatic Macrophytes: _____		Leaf Snags: _____		Coarse Woody Debris: _____	
Other (____): _____		Overhanging Vegetation: _____		Other (____): _____	
Embeddedness of Substrate at Sample Site (%) 20			Canopy Cover at Sample Site (%) 80		

D3-92
 A1-103

Stream and Watershed Descriptors

N = Not a problem
 U = Uncertain
 PL = Present, Low Impact
 PH = Present, High Impact

Factors that may be influencing Water Resource Integrity	Local	Water-shed	Factors that may be influencing Water Resource Integrity	Local	Water-shed
Biological			Chemical		
Algae: - Diatoms / Periphyton	~	~	Chlorine	~	~
- Filamentous Algae	~	~	Dissolved Oxygen	~	~
- Planktonic Algae	~	~	Nutrients (P, N...)	~	~
Iron Bacteria	~	~	Toxics: - Inorganic (Metals)	~	~
Macrophytes	~	~	- Organic (PCBs, pesticides...)	~	~
Slimes	~	~	Other - Specify:	~	~
Other - Specify: MOSS	PL	PL	Sources of Stream Impacts		
			Bank Erosion	~	~
			Point Source - Specify:	~	~
Physical			Pasturing of Livestock	~	~
Bank Erosion	PL	PL	Runoff: - Barnyard	~	~
Channelization: - Upstream	~	~	- Construction	~	~
- Downstream	~	~	- Cropland	~	~
Hydraulic Scour / Channel Incision	~	~	- Urban	~	~
Impoundment: - Upstream	~	~	Septic Systems	~	~
- Downstream	~	~	Tile Drainage - Organic Soils	~	~
Low Flow	~	~	- Mineral Soils	~	~
Sedimentation	~	~	Springs	PL	PL
Sludge	~	~	Tributary(s)	~	PL
Thermal	~	~	Wetland	PL	PL
Turbidity	~	~	Other - Specify:		
Other - Specify:					

Comments

Special Instructions for Laboratory

For Lab Use Only

Sample Sorter <i>Kyle W. Cox</i>	Taxonomist <i>Dimick, Jeffrey</i>	Estimated Percent of Sample Sorted <i>13%</i>
Date Processed <i>10/10/17</i>	Specimens Saved <i>Subsample archived in ABC until Dec 2020</i>	

Taxa	Life Stage	Bench Tally	Count	Taxonomic Reference	Condition	Unique Taxon
<i>Allocaenia</i>	L	I	1	Hilsenhoff 1995		
<i>Paracaenia angulata</i>	L	II	2	Hilsenhoff 1974		
<i>Taeniopteryx</i>	L	I	1	Hilsenhoff 1995	imm	
<i>Baetis brunneicolor</i>	L	III	3	Kluebertanz 2016		
<i>Aesopina</i>	L	III	3	"	dam	N
<i>A. p. (s.l.) macdunnoughi</i>	L	-I	6	"		
<i>Maccaffertium vicarium</i>	L	-III	9	"		
<i>Leptophlebia</i>	L	I	1	"	dam	
<i>Paraleptophlebia</i>	L	-III	8	"	dam/imm	
<i>Cheumatopsyche</i>	L	II	3	Hilsenhoff 1995		
<i>Hydropsyche</i>	L	II	2	"	imm	N
<i>H. betteni</i>	L	-III	8	Schm., Hils. 1986		
<i>Dipteroneura modesta</i>	L	III	4	Hilsenhoff 1995		
<i>Zepidostoma</i>	L	II	2	"		
<i>Limnephilidae</i>	L	I	1	"	imm	
<i>chimarra</i>	L	II	2	"	imm	N
<i>Ch. aterrima</i>	L	I	1	Hilsenhoff 1982		
<i>Optioservus</i>	L	III	3	Hils., Schow. 1992	imm	
<i>Atherix variegata</i>	L	II	2	Hilsenhoff 1995		
<i>Bezzia/Palpusomyia</i>	L	III	3	"		
<i>Nemerodromia</i>	L	I	1	cont. Mem. 2008		
<i>Simulium fiberosum species group</i>	L	I	1	Ader et al 2004		
<i>Antocha</i>	L	I	1	Hilsenhoff 1995		
<i>Dicranota</i>	L	II	2	"		
<i>Lumbriculus</i>	A	-III	8	Brin, Cook 1966		
<i>Pisidium</i>	A	I	1	Burch 1972		
Split A3 Chironomidae	L	-I, II				
<i>Nilotanyptus</i>	L	-II	7	Cran., Epler 2013		
<i>Theremanniomyia group</i>	L	I	1	"	imm	
<i>Orthocladius</i>	L	I	1	Cranston 2013	imm	N
<i>Diplocladius</i>	L	I	1	Ader + 3 2013		
<i>Parametriocnemus</i>	L	-III	8	"		
<i>Tretania bavaria group</i>	L	II	2	Bode 1983		
<i>Heleniella</i>	L	I	1	Ader + 3 2013		
<i>Chironominae</i>	L	III	3	Cranston 2013	not indet imm	N
<i>Paratanytarsus longistylus</i>	L	-III	8	Epler et al 2013		

